

No. J-11015/484/2008-IA.II (M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi-110003
Dated: 31 December, 2013

To,

M/s Global Coal & Mining Pvt. Ltd.,
7th Floor, Corporate Tower,
Ambience Mall,
NH-8,
GURGAON - 122 001.

Sub. : Expansion of Coal Beneficiation Plant (2 MTPA to 4 MTPA in an area of 6.32 ha) of M/s Global Coal & Mining Pvt. Ltd., located at village: Tentulei, post: South Balanda, Tehsil Talcher, Dist. Angul, Orissa (EC based on TOR granted on 31.12.2008) -reg.

Sir:

This is with reference to letter no. GCMPL/TAL/EC/2008 dated 10.11.2008 with the application for Terms of Reference (TOR) and this Ministry's letter dated 31.01.2008 granting TOR. Reference is also invited to the letter no GCMPL/TAL/EC/2009 dated 15.12.2009 and subsequent letter no. dated 30.01.2010; 11.02.2010; 11.04.2011; 18.05.2011; 12.01.2012; 17.08.2012; 06.12.2012; 04.06.2013 and 22.08.2013 for environmental clearance on the above-mentioned subject.

2. The Ministry of Environment & Forests has considered the application. It is noted that the proposal is for grant of Environmental Clearance for Expansion of Coal Beneficiation Plant (2 MTPA to 4 MTPA in an area of 6.32 ha) of M/s Global Coal & Mining Pvt. Ltd., located at village: Tentulei, post: South Balanda, Tehsil Talcher, Dist. Angul, Orissa. The proposal was reconsidered in the 67th meeting held on 4th-5th February, 2013. The proponent has informed that:

- i. The proposal is for expansion in production from 2 MTPA to 4 MTPA in an area of 6.32 ha.
- ii. It was informed that the EC was granted by MOEF on 15.07.2009 for expansion of the Coal Beneficiation Plant of 1.5 million tonnes per annum (MTPA) capacity of raw coal by wet process (Dense Media) to 4 MTPA capacity in a total area of 8.56 ha.
- iii. As per the original proposal for which EC was granted, the expansion project of 2.5 MTPA would be by dry process involving pneumatic jigs (0.5 MTPA) and by wet process using Batac Jigs (2 MTPA).
- iv. It was stated that an application was made on 26.07.2011 to the Odhisha SPCB and a request made to MOEF for modification of EC for change in technology from pneumatic jigs (dry process) to wet process.
- v. It was clarified that the Pneumatic Jigs have not been installed. It was stated that a thickener would be added to the slurry which would be mixed with coal rejects or with clean coal for its utilisation, i.e. the slurry will not be discharged out of the premises.

EC_Global

- vi. A number of Reserve Forests (8) and Protected Forest (2) are found in the 10 Km study area. River Brahmani flows at a distance of 7.5 km in eastern direction.
- vii. A number of industries and coal mine such as NTPC-Kaniha Plant (9.5 km), MCL Mines (5 km), Fertilizer Corporation of India (FCI) (10 km) in south east, NALCO (3.0 km) are situated in the study area, which is part of the Angul-Talcher critically polluted area.
- viii. Of the total plant area, 1.01 ha is for the Plant, 0.50 ha is for roads, 0.5 ha is for coal stockyards, 0.16 ha is parking area, 0.40 ha is for infrastructure, and 2.50 ha is for plantation/green belt, and 0.50 ha is for proposed expansion of the plant.
- ix. The technology to be used is HM Cyclone. Sources of raw coal are the coalmines of MCL such as Jagannath, Ananta and Bhubaneshwari and the end user of the washed coal is Neyveli Lignite Corp. Ltd., APGENCO, etc. Grade of raw coal is F-G with 42-45% ash content and clean coal would be with an ash content of $33.5 \pm 0.5 \%$ and coal rejects of $58 \pm 3\%$ ash content.
- x. Of the total 4 MTPA of raw coal, 2.94 MTPA would be clean coal and 1.06 MTPA would be coal rejects. Coal fines would be collected and blended with clean coal and sold to consumers to users such as brick manufacturers and Bhushan Steel & Power.
- xi. Raw coal would be obtained by road using tipping trucks.
- xii. Coal is being received from 3 mines of MCL, Hingula at the distance of 22 km, Jagannath at the distance of 5 km and Samleshwari at the distance of 8 km. Washed coal 1.33MT send to APGENCO. The abandoned railway siding of FCI is being utilized for transportation. Presently, the loading is being done by pay loaders
- xiii. The total water requirement is 630 m³/d of which 300 m³/d is for the existing unit of 2 MTPA and the balance 330 m³/d is for the proposed expansion unit of which 240 m³/d is for washing, 10 m³/d is for drinking, 70 m³/d is for green belt and dust suppression and 10 m³/d for evaporation losses. Source of water is MCL mine pit water for mine and green belt development and the water would be brought by pipelines for a distance of 5km to the washery for operations and water for drinking are met from bore-well.
- xiv. The total manpower of 175 persons includes 115 existing and 60 proposed for the expansion unit. Capital cost of the project is Rs 20.50 crores.
- xv. Annual cost for EMP is Rs 1.59 crores. Annual budget for CSR is Rs 16 lakhs.
- xvi. Clean coal to APGENCO would be by trucks/rail.
- xvii. The proponent informed that GCMPL is in process of developing its own railway siding using an old FCI railway line alignment. DPR has already been prepared and approved by East Cost Railway vide letter dated 02.03.2010 and the line would be soon ready for the expansion of the washery and thereafter clean coal and rejects will be transferred to the siding by belt conveyor so road transport for clean coal and rejects will be eliminated.
- xviii. It was informed that AAQ monitoring data is being regularly reported to OSPCB and a CTO was obtained on 28.04.2011.

3. The proposal was considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 67th meeting held on 4th-5th February, 2013 for granting Environmental Clearance. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Expansion of Coal Beneficiation Plant (2 MTPA to 4 MTPA in an area of 6.32 ha) of M/s Global Coal & Mining Pvt. Ltd., located at village: Tentulei, post: South Balanda, Tehsil Talcher, Dist. Angul, Orissa** under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments thereto subject to the compliance of the terms and conditions mentioned below:

A. Specific conditions:

- i. Coal transport from mines by belt conveyor to be expedited and till its start to be done by mechanically covered trucks. The washed coal transport to the siding and loading into Railway. Wagons will be by silo system and to be completed within 2 yrs. matching the proposed expansion.
- ii. Raw Coal linkage from the coal company for washing or beneficiation is from a basket of group of mines. As soon as MCL reverts to central dispatch point, M/s Global Coal & Mining Pvt. Ltd. shall install it's conveyor system to lift coal from that location. As desired, it was further agreed that washed coal shall be conveyed to the proposed railway siding through a set of conveyors to avoid road transport.
- iii. Methods be explored for recovery of Mercury in fly ash.
- iv. As washery rejects goes to FBC Boiler of 35 MW Power Plant, till then M/s Navbharat which has FBC will take the rejects. A letter in this regard should be submitted to the Ministry for record.
- v. A plan of coal evacuation to end users by rail mode be prepared and implemented.
- vi. The raw coal transportation should be either by rail or conveyor as the project is located in CPA of Angul-Talcher.
- vii. The proponent should dovetail transportation with MCL as MCL itself is required to establish a proposed railway line for transportation of coal from MCL mines.
- viii. Best option for transportation of coal be implemented.
- ix. The proponent shall provide specific measures and other mitigative measures for reducing pollution and for reducing environmental impacts of operation of the washery in the midst of a CPA Angul-Talcher. The measures should be based on the Environmental Action Plan prepared by OSPCB recommended for the Angul-Talcher Region.
- x. Massive tree plantation is required in the proposed area. Three-tier green belt should be developed along the washery boundary and along transfer and loading points and in the proposed railway siding to mitigate/check dust pollution and the entire coal dispatch from the group of mines should be dove-tailed with the Coal evacuation system prepared for the Angul-Talcher. A 3-tier avenue plantation should also be developed along vacant areas, near washery, storage yards, loading points and transfer points and along internal roads and main approach roads and on the 2-km road upto the railway siding and at the siding.
- xi. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored minerals do not catch fire.
- xii. Hoppers of the coal crushing unit and washery unit shall be fitted with high efficiency bag filters and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
- xiii. All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned with 8 mechanical sweepers.
- xiv. Trucks engaged for mineral transportation outside the washery upto the railway siding covering a distance of 2km shall be optimally loaded and covered with tarpaulin with no spillage en route. The trucks shall be properly maintained and emissions shall be below notified limits. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.



- xv. Records of quantum and ash content of raw coal being washed, and clean coal and coal rejects produced from every batch of washing shall be maintained and details thereof uploaded on the company website.
- xvi. The Washery unit shall be a zero-discharge facility and no wastewater shall be discharged from the washery into the drains/natural watercourses. Recycled water shall be used for development and maintenance of green belt and in the Plant Operations.
Industrial wastewater (workshop) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before use within the washery premises. Oil and grease trap shall be installed for treatment of workshop effluents. No wastewater shall be discharged from the washery into the drains/natural watercourses.
- xvii. No additional groundwater shall be used for the Plant Operations. Any additional water requirement envisaged shall be obtained by recycle/reuse to the maximum extent and from rainwater harvesting measures.
- xviii. Socio-economic and welfare measures for the local communities for the adjoining villages shall be implemented under CSR. Activities under CSR activities to be undertaken for the adjoining villages shall be identified in consultation with the local authorities, the details of status of implementation of CSR and expenditure thereon which should be annually updated on the company website.
- xix. Heavy metal content in raw coal, and washed coal shall be analysed once in a year and records maintained thereof.

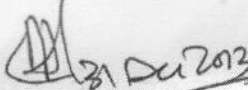
B. General Conditions:

- i. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.
- ii. No change in the calendar plan of production for quantum of mineral coal shall be made.
- iii. Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM₁₀, PM_{2.5}, SO₂ and NO_x monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.
- iv. Data on ambient air quality (PM₁₀, PM_{2.5}, SO₂ and NO_x) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EPA rules, 1986 shall be furnished as part of compliance report.
- v. Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.
- vi. Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.
- vii. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.
- viii. Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis

equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EPA Rules, 1986.

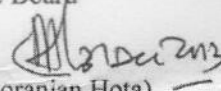
- ix. Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.
- x. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.
- xi. A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.
- xii. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.
- xiii. The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at <http://envfor.nic.in>.
- xiv. A copy of the environmental clearance letter shall be marked to concern Panchayat/Zila Parishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.
- xv. A copy of the environmental clearance letter shall be shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.
- xvi. The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM₁₀, PM_{2.5}, SO₂ and NO_x (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.
- xvii. The project proponent shall submit six monthly compliance reports on status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the Ministry, respective Zonal Office s of CPCB and the SPCB.
- xviii. The Regional Office of this Ministry located in the Region shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
- xix. The Environmental statement for each financial year ending 31 March in For -V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF by e-mail.

4. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.
5. The proponent is required to obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
6. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
7. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.
8. The above conditions will be enforced *inter-alia*, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.


(Dr. Manoranjan Hota)
Director

Copy to:

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Orissa, Secretariat, Bhubaneswar.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrashekarapur, Bhubaneswar - 751023.
4. Member Secretary, Orissa State Pollution Control Board, Neelakanth Nagar, Unit-VIII, Bhubaneswar.
5. Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi -110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
7. District Collector, Angul, Government of Orissa.
8. Monitoring File 9. Guard File 10. Record File 11. Notice Board


(Dr. Manoranjan Hota)
Director